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PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:
    GEOFFREY S. STRONGIN
    BRIAN C. BARNES
    RODNEY SCHMIDT

Serial No.: 09/825,905

Filed: April 4, 2001

For: METHOD AND APPARATUS FOR
     SECURING PORTIONS OF MEMORY

Examiner: SHENG JEN TSAI

Group Art Unit: 2186

Attorney Docket: 2000.050200/TT3965

Customer No.: 23720

REPLY BRIEF

**MAIL STOP APPEAL BRIEF –
PATENT**
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

    Appellants hereby submit this Reply Brief in response to the Examiner's Answer

mailed September 28, 2007. The two-month statutory response date is November 28,

2007. This Reply Brief is being filed on or before the due date, therefore, it is timely

filed.

    If an extension of time is required to enable this paper to be timely filed and there

is no separate Petition for Extension of Time filed herewith, this paper is to be construed

as also constituting a Petition for Extension of Time Under 37 CFR § 1.136(a) for a

period of time sufficient to enable this document to be timely filed.

No fee is believed to be due as a result of this filing. However, should any fee(s) under 37 C.F.R. §§ 1.16 to 1.21 be required for any reason, the Commissioner is authorized to withdraw funds from Williams, Morgan & Amerson, P.C. Deposit Account No. 50-0786/2000.050200/TT3965.

REMARKS

The Applicants in this Reply respond to a specific argument raised in the Examiner's Answer to demonstrate a fundamental flaw in the Examiner's rejection. This fundamental flaw spans across many of the rejected independent claims (*e.g.,* claim 1, 11, 15, 19, and 24), and the Board can summarily dismiss the Examiner's case with respect to at least these claims (as well as their dependent claims) on this basis alone. For all the remaining arguments, the Applicants rest on the Opening Brief, and maintain that the Examiner has failed to successfully rebut the Applicants' arguments to establish a prima facie case of anticipation and/or obviousness.

As noted in the Opening Brief, independent claims 1, 11, 15, 19, and 24 call for controlling access to the "selected information" using two tables (*e.g.,* claim 1) or levels (*e.g.,* claim 11). There is no dispute between the parties relating to the claim language. The parties dispute whether Nozue discloses the claimed feature of controlling access to the "selected information" in the manner recited in the claims.

In the Opening Brief, the Applicants noted that, during prosecution, the Examiner continued to hide behind generalities when it came to identifying what in Nozue corresponds to "selected information" of the claims. *See, e.g.,* Response 12-5-05, p.11 (stating that even though "selected information" is recited in every element of claim 1, the Examiner's remains purposefully nebulous by failing to identify what in Nozue corresponds to "selected information."). It was not until the Advisory Action did the Examiner finally reveal his position on "selected information," stating that he refers to the **contents** of the first and the second tables [figures 45 and 24A of Nozue] correspond

to the 'selected information' for memory protection. *See* Advisory Action, p. 2 (emphasis added).

As noted above, the claims call for controlling access to the "selected information" using two tables (*e.g.,* claim 1) or two levels (*e.g.,* claim 11).[1] To establish anticipation under the Examiner's application of Nozue (where the "selected information" corresponds to the "contents" of theses tables), the Examiner must show that both tables of Figure 45 and 24A of Nozue "control access" to each other's contents. In the Opening Brief, at pp. 7-8, the Applicants demonstrated that neither table "controls access" to the "contents" of the other table.[2] As such, Nozue does not teach two tables (or even levels) that control access to the "selected information." Notably, the Examiner, in his Answer, does **not** dispute that the tables of Figure 45 and 24 in Nozue do not control access to each other's "contents." Accordingly, the Examiner has failed to establish a prima facie case of anticipation.

In his Answer, the Examiner for the first time advances a new theory to satisfy the "selected information" feature of claim 1. This time, instead of maintaining that the "contents" of Figures 45 and 24A correspond to the "selected information," the Examiner argues that "selected information" corresponds to the "regions" referenced in Figure 45. *See* Answer, p. 15. As explained below, the Examiner's new-found theory is equally flawed as the original one.

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[1] For the purposes of this discussion, claim 1 (which refers to "tables") is addressed, although the analysis is applicable to claims that call for two "levels."

[2] The Applicants pointed out in the Opening Brief that the two tables in Nozue serve two independent, different purposes – Figure 45 table tracks logical address space for programs mapped to a common logical address space, whereas Figure 24A is a translation look-aside table that defines access permissions for various threads. As such, neither table "controls access" to the "contents" of the other table.

Figure 45 of Nozue shows a program management table that it is used to track the logical address space of a program that is mapped to the same logical address space as other programs. Nozue, 42:6-8; 41:47-53. Specifically, Figure 45 shows a region, the beginning and starting address of this region, and a protection key associated with the region. *Id.* According to the Examiner, the protection key protects the region (which the Examiner now asserts is the "selected information" recited in the claims).

The Examiner's new position is problematic for several reasons. First, the term "selected information," by definition, refers to some select or chosen "information." A "region," on the other hand, refers to "memory" or storage space. Thus, on its face, "information" is different from "region." Indeed, the plain language of the claims confirms that "region" (or memory) is different from "information." For example, claim 1 specifies a "memory that houses the selected information." Thus, the claim language clarifies that the "information" and "memory" (or "region") are not the same, but rather that "information" is stored in a "memory" or "region." For this reason alone, the Examiner's new-found theory is flawed.

The Examiner's argument that the "selected information" of the claims corresponds to "region" of Figure 45 of Nozue is flawed for another fundamental reason. This is because the so-called "region" is not protected by two tables or levels, as called for by the claims (*e.g.,* claim 1 and 11). The "region" or "regions" identified in Figure 45 are not protected by the Figure 24A table (the "second table" of the claims, according to the Examiner). Figure 24A of Nozue illustrates a translation look-aside buffer (TLB) check device 103 that checks <u>a translation look-aside buffer (TLB)</u>, and not the regions

identified in Figure 45. *See* Nozue, col. 23:40-41 (stating that the TLB check device 103 is for "checking a TLB.").

The Examiner's new theory fails yet for another fundamental reason. Applicants note that while claim 1 specifies that at least two tables are used to control access to the "selected information," it further specifies that the second table controls such access by associating <u>a read or write privilege</u> with one or more physical addresses of <u>a memory that houses the selected information</u>. Thus, to establish anticipation, under the Examiner's application of Nozue (where the "selected information" now corresponds to the "regions" of Figure 45), the Examiner must demonstrate that the table of Figure 24A ("second table") associates read/write privilege with one or more physical addresses of the memory that houses the "regions" ("selected information"). Clearly, Nozue does not teach this. Nozue describes that the "rwx" permission bits 323 in Figure 24A are associated with each of the <u>threads</u> 318. Nozue, 25:5-6 (stating that "memory access mode permission (*rwx*) 323 [are] *associated with* each of the *thread* numbers 318") (emphasis supplied). Nozue does not describe that rwx permission bits of Figure 24A protect the "regions" ("selected information," according to the Examiner) referenced in Figure 45 of Nozue. In contrast, claim 1 calls for associating the read/write privilege(s) with the physical address of the memory that houses the selected information. The other independent claims, such as claims 11, 15, 19, 24, similarly recite a corresponding claim feature. For this additional reason, the Examiner's argument fails.

In view of the foregoing, it is respectfully submitted that the Examiner erred in not allowing all claims pending in the present application over the prior art of record.

Reply Brief
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The undersigned attorney may be contacted at (713) 934-4064 with respect to any questions, comments, or suggestions relating to this appeal.

Respectfully submitted,

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